

# Product Description

## SALSA® Binning DNA SD071-S01

### Version S01

#### Catalogue number

- **SD071:** SALSA Binning DNA, 6 reactions

#### Precautions and warnings

For professional use only. Always consult the most recent product description AND the corresponding probemix product description AND the MLPA General Protocol before use: [www.mrcholland.com](http://www.mrcholland.com). Binning DNA is not known to contain any harmful agents.

#### Safety data sheet

Based on the concentrations present, none of the ingredients are hazardous as defined by the Hazard Communication Standard. **A Safety Data Sheet (SDS) is not required for these products:** none of the preparations contain dangerous substances (as per Regulation (EC) No 1272/2008 [EU-GHS/CLP] and amendments) at concentrations requiring distribution of an SDS (as per Regulation (EC) No 1272/2008 [EU-GHS/CLP] and 1907/2006 [REACH] and amendments). If spills occur, clean with water and follow appropriate site procedures.

#### General information

The SALSA Binning DNA SD071 is a research use only (RUO) reagent to be used in combination with SALSA MLPA probemix P280-B3/B4 SLC26A4, a SALSA MLPA Reagent Kit and Coffalyser.Net™ analysis software for the processes of linking all probe signals to their identity by use of the probe lengths. SD071 contains the targets of all probes included in the above-listed probemix, including the mutation-specific probe targets *SLC26A4* L236P, *SLC26A4* IVS8+1G>A, and *SLC26A4* T416P.

Binning DNA should never be used as a reference sample in the MLPA data analysis. Neither should it be used in quantification of mutation signals.

#### Experimental set up

MLPA reactions for binning purposes should be performed with 5 µl of Binning DNA. Inclusion of one reaction with SALSA Binning DNA SD071 in the initial MLPA experiment is essential as it can aid in data binning of the peak pattern when using Coffalyser.Net software. Furthermore, Binning DNA should be included in the experiment whenever changes have been applied to the set-up of the capillary electrophoresis device (e.g. when a different polymer type is used).

#### Data analysis

Coffalyser.Net software should be used for analysis of MLPA experiments. When performing the fragment analysis step in Coffalyser.Net, select SD071 in the *bin smpl* -column. By selecting the SD071 sample as your binning sample, probes will be correctly identified in the peak pattern across all samples. Coffalyser.Net software is freely downloadable at [www.mrcholland.com](http://www.mrcholland.com).

#### Binning DNA content

SD071 consists of a mixture of female genomic DNA from healthy individuals and a titrated amount of plasmid DNA that contains partial sequences of the *SLC26A4* gene. These partial sequences include three different mutations that will be detected by the mutation-specific probes present in the above-listed probemix. See **Table 1** and the corresponding probemix product descriptions for more details on mutation-specific probe targets present. The indicated mutation-specific probes will generate a signal on SD071.

Please note that the plasmid DNA also contains the target sequence of the 105 nt chromosome Y specific control fragment. As a result, the 100 and 105 nt control fragments indicate the presence of two copies chromosome X and one copy chromosome Y.

**Table 1. Mutation-specific probe targets in Binning DNA SD072-S01**

Probemix	Gene/Exon	Probe length (nt)	Probe ID	Probemix version	Details
P280	SLC26A4 exon 6	382	09246-L13230	B4, B3	L236P; c.707T>C
	SLC26A4 exon 8	321	09249-L30464	B4, B3	IVS8+1G>A; c.1001+1G>A
	SLC26A4 exon 10	227	20624-L28511	B4, B3	T416P; c.1246A>C

**Note:** Please consult the corresponding probemix product description for more information about exon numbering, mutation nomenclature and gene transcripts used.

<b>More information: <a href="http://www.mrcholland.com">www.mrcholland.com</a>; <a href="http://www.mrcholland.eu">www.mrcholland.eu</a></b>	
	MRC Holland bv; Willem Schoutenstraat 1 1057 DL, Amsterdam, The Netherlands
E-mail	<a href="mailto:info@mrcholland.com">info@mrcholland.com</a> (information & technical questions) <a href="mailto:order@mrcholland.com">order@mrcholland.com</a> (orders)
Phone	+31 888 657 200

<b>Implemented changes in the product description</b>
<p><i>Version S01-04 – 01 December 2021 (03)</i></p> <ul style="list-style-type: none"> <li>- Product description rewritten and adapted to a new template.</li> <li>- Information about P280-B4 probemix added to general information and table 1.</li> </ul> <p><i>Version S01-03 – 09 July 2021 (15)</i></p> <ul style="list-style-type: none"> <li>- Information about P247-A2 probemix removed.</li> <li>- Various minor textual changes.</li> </ul> <p><i>Version S01-02 – 20 April 2018 (15)</i></p> <ul style="list-style-type: none"> <li>- Product description adapted to new probemix version in text on page 1 and in Table 1.</li> <li>- Minor textual adjustments done.</li> </ul> <p><i>Version S01-01 – 30 May 2017 (15)</i></p> <ul style="list-style-type: none"> <li>- Not applicable, new document.</li> </ul>